Listing of the Claims

Below is a listing of the pending claims in the application:

1.   (previously presented) A method for storing data as bit cells in a prerecorded area of an optical recording medium using pits and lands, wherein the pits and lands are placed out of a center of a track of the prerecorded area and the data is encoded by bit cell signal transitions of the pits and lands from one side of the track center to another side of the track center, and the method comprises a step of placing pits and lands, which are arranged in a fixed sequence of pit lengths and land lengths, at positions of all bit cell signal transitions.

2.   (cancelled)

3.   (previously presented) The method according to claim 1, wherein the pits are arranged symmetrically relative to the bit cell signal transitions.

4.   (previously presented) The method according to claim 3, further comprising a step of arranging the lands adjacent to the pits and symmetrically relative to the bit cell signal transitions.

5.   (previously presented) The method according to claim 1, further comprising a step of placing an identical number of pits and lands in each one of the bit cells.

6.   (previously presented) The method according to claim 1, further comprising a step of setting lengths of the pits and lands to integer multiples of a predefined length based on a nominal channel clock and a nominal rotational speed of the optical recording medium.

7.   (previously presented) The method according to claim 1, further comprising a step of inserting a gap at the bit cell signal transitions.

8.   (previously presented)   The method according to claim 1, further comprising a step of arranging pits, which are long compared with a diameter of a readout spot, near the bit cell signal transitions.

9.   (previously presented)   The method according to claim 8, further comprising a step of arranging lands, which are short compared with the diameter of a readout spot, distanced from the bit cell signal transitions.

10.   (previously presented)   The method according to claim 8, further comprising a step of arranging lands, which are short compared with the diameter of the readout spot, distanced from the bit cell signal transitions.

11.   (previously presented)   The method according to claim 10, further comprising a step of arranging pits, which are short compared with the diameter of a readout spot, distanced from the bit cell signal transitions.

12.   (previously presented)   The method according to claim 10, further comprising a step of arranging pits with a length corresponding to the full width at half maximum of the intensity distribution of the readout spot near the bit cell signal transitions.

13.   (previously presented)   The method according to claim 12, further comprising a step of arranging pits, which are short compared with the diameter of a readout spot, distanced from the bit cell signal transitions.

14-17. (cancelled)

18.   (previously presented)   The method according to claim 1, further comprising a step of varying a distance between the track center and the pits and lands.

19.   (previously presented)   The method according to claim 1, further comprising a step of varying a width of the pits.

20.   (previously presented)   The method according to claim 1, wherein an average of a modulation signal containing the stored data is zero for the bit cells representing a digital '1' and zero for two consecutive bit cells representing a digital '0'.

21.   (previously presented)   An optical recording medium, comprising at least one prerecorded area in which data is stored as bit cells using pits and lands, wherein the pits and lands are placed out of a center of a track of the at least one prerecorded area and the data is encoded by bit cell signal transitions of the pits and lands from one side of the track center to another side of the track center, and further wherein pits and lands, which are arranged in a fixed sequence of pit lengths and land lengths, are placed at positions of all bit cell signal transitions.

22.   (previously presented)   An apparatus for reading data from an optical recording medium comprising at least one prerecorded area in which the data is stored as bit cells using pits and lands, wherein the pits and lands are placed out of a center of a track of the at least one prerecorded area and the data is encoded by bit cell signal transitions of the pits and lands from one side of the track center to another side of the track center, and further wherein pits and lands, which are arranged in a fixed sequence of pit lengths and land lengths, are placed at positions of all bit cell signal transitions.

23.   (previously presented)   An apparatus for writing data to an optical recording medium comprising at least one prerecorded area in which the data is stored as bit cells using pits and lands, wherein the pits and lands are placed out of a center of a track of the at least one prerecorded area and the data is encoded by bit cell signal transitions of the pits and lands from one side of the track center to another side of the track center, and further wherein pits and lands, which are arranged in a fixed sequence of pit lengths and land lengths, are placed at positions of all bit cell signal transitions.